

JPW



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Confirmation No. 7969

Darrell R. ANDERSON et al.

Group Art Unit: 1644

Application Serial No. 10/073,138

Examiner: Phillip Gambel

Filed: February 13, 2002

Title: IDENTIFICATION OF UNIQUE BINDING INTERACTIONS BETWEEN CERTAIN
ANTIBODIES AND THE HUMAN B7.1 AND B7.2 CO-STIMULATORY ANTIGENS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

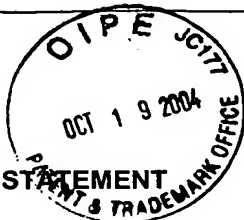
Pursuant to 37 C.F.R. §.1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the listed references be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue there from.

This Information Disclosure Statement is being filed before the mailing date of the first official action on the merits in the present application. No certification or fee is required, pursuant to 37 C.F.R. §.1.97(b)(3),

Respectfully Submitted,

Thomas A. Cawley, Jr., Ph.D.
Registration Number 40,944

Date: October 19, 2004
PILLSBURY WINTHROP LLP
Telephone: (703) 905-2000
Facsimile: (703) 905-2500
P.O. Box 10500
McLean, VA 22102
TAC/CR/sm

Atty. Ref. No.
037003-0280705Client Ref.
1995-30-0233CP3INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

Applicant: ANDERSON et al.

Appln. No.: 10/073,138

Filing Date: February 13, 2002

Examiner: Gambel, P. Group Art Unit: 1644

Date: October 15, 2004

Page 1 of 2

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
AR	5,304,635	04/1994	Imam			
BR						
CR						

FOREIGN PATENT DOCUMENTS

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
					Enclosed	No	Enclose	No
DR								
ER								
FR								

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

GR	Alegre M., et al, "Effect of single amino acid mutation on the activating and immunosuppressive properties of a "Humanized" OKT3 monoclonal antibody," J. Immunol., 1992, 148:3461-3468.
HR	Azuma M., et al., "CD28 Interaction with B7 Costimulates Primary Allogeneic Proliferative Responses and Cytotoxicity Mediated by Small Resting T Lymphocytes," J. Exp. Med., 1992, 175:353-360.
IR	Azuma M., et al., "Functional Expression of B7/BB1 on Activated T Lymphocytes," J. Exp. Med., 1993, 177:845-850.
JR	Azuma M.D., et al., "B70 Antigen is a Second Ligand for CTLA-4 and CD28," Nature, 1993, 366:76-79.
KR	Boussiotis V.A., et al., "Activated human B lymphocytes express three CTLA-4 counter-receptors that co-stimulate T-Cell activation," Proc. Natl. Acad. Sci., USA, 1993, 90:11059-11063.
LR	Cohen J., "Mounting a targeted strike on unwanted immune responses," (news; comment), Science, 1992, 257:751.
MR	De Boer M., et al., "Functional Characterization of a Novel Anti-B7 Monoclonal Antibody," Eur. Journal of Immunology, 1992, 22:3071-3075.
NR	Dermer G.B., et al., "Another Anniversary for the war on cancer," Biotechnology, 1994, 12:320.
OR	Engel et al, "The B7-2 (B70) costimulatory molecule expressed by monocytes and activated B lymphocytes is the CD86 differentiation antigen," Blood, 1994, 84, 1402-1407.
PR	Freeman G.J., et al., "CTLA-4 and CD28 MRNA are Coexpressed in Most T Cells After Activation," The Journal of Immunology, 1992, 149:3795-3801
QR	Geenen V. and G. Kroemer, "Multiple Ways to Cellular Immune Tolerance," Immunology Today, 1993, 14:573.
RR	Gimmi C.D., et al., "Human T-Cell Clonal Anergy is Induced by Antigen Presentation in the Absence of B7 Costimulation," Proc. Natl. Acad. Sci., 1993, 90:6586-6590.
SR	Gribben J.G., et al., "CTLA-4 mediates antigen specific apoptosis of human T cells." Proc. Natl. Acad. Sci. USA, 1995, 92:811-815.
TR	Grumet F.C., et al., "Soluble form of an HLA-B7 Class I Antigen Specifically Suppresses Humoral Alloimmunization." Human Immunology, 1994, 40:228-234.
UR	Harding F.A., et al., "CD28 Mediated Signalling Co-stimulates Murine T Cells and Prevents Induction of Anergy in T Cell Clones." Nature, 1992, 356:607-609.
VR	Hart D.N.J., et al., "B7/BB-1 is a Leucocyte Differentiation Antigen on Human Dendritic Cells Induced by Activation." Immunology, 1993, 79:616-620
WR	Ionescu-Tirgoviste, et al, "Correlations between insulin antibodies and the HLA system in a group of Type I diabetic patients in Bucharest," Med. Interre, 1986, 24(1), 11-17.

XR	Janeway C.A., Jr. and K. Bottomly, "Signals and Signs for Lymphocyte Responses," Cell, 1994, 76:275-285.
YR	Jenkins M.K., "The Role of Cell Division in the Induction of Clonal Anergy." Immunology Today, 1992, 13:69.
ZR	June C.H., et al., "The B7 and CD28 receptor families," Immunol Today, 1994, 15:321-331.
AAR	Krummel M., et al., "CD28 and CTLA-4 have opposing effects on the response of T cells to stimulation," J. Exp. Med. 1995, 182:459-466.
BBR	LaSalle J.M., et al., "Early signaling defects in human T cells anergized by T cell presentation of autoantigen," J. Exp. Med., 1992, 176:177-186.
CCR	Lenschow D.J., et al., "Long-Term Survival of Xenogeneic Pancreatic Islet Grafts Induced by CTLA-4Ig," Science, 1992, 257:789-795.
DDR	Lenschow D.J., et al., "Expression and Functional Significance of an Additional Ligand for CTLA-4," Proc. Natl. Acad. Sci., USA, 1993, 90:11054-11058.
EER	Lin H., et al., "Long-term Acceptance of Major Histocompatibility Complex Mismatched Cardiac Allografts Induced by CTLA-4-Ig Plus Donor Specific Transfusion," J. Exp. Med., 1993, 178:1801.
FFR	Linsley, P.S., et al., "CTLA-4 is a Second Receptor for the B Cell Activation Antigen B7," J. Exp. Med., 1991, 174:561.
GGR	Linsley P.S., et. al., "T-Cell Antigen CD28 Mediates Adhesion with B Cells by Interacting with Activation Antigen B7/BB-1." Proc. Natl. Acad. Sci., 1990, 87:5031-5035.
HHR	Linsley, et al, "CD28 Engagement by B7/BB-1 Induces Transient Down-Regulation of CD28 Synthesis and Prolonged Unresponsiveness to CD28 Signaling," The Journal of Immunology, 1993, 150:3161-3169.
IIR	Linsley, et al., "Binding of the B cell activation antigen B7 to CD28 costimulates T cell proliferation and interleukin 2 mRNA accumulation," J. Exp. Med., 1991, 173:721-730.
JJR	Linsley P.S., et. al., "Coexpression and Functional Cooperation of CTLA-4 and CD28 on Activated T Lymphocytes." J. Exp. Med., 1992, 176:1595-1604.
KKR	Morton P.A., et al., "Differential effects of CTLA-4 substitutions on the binding of human CD80 (B7-1) and CD86 (B7-2)," J. Immunol., 1996, 156:1047-1054.
LLR	Nestle F.O., et al, "Characterization of dermal dendritic cells in psoriasis," J. Clin. Invest., 1994, 94: 202-209.
MMR	Schwartz R.H., "Co-stimulation of T lymphocytes: The role of CD28, CTLA-4, and B7/BB1 in interleukin-2 production and immunotherapy," Cell, 1992, 71:1065-1068.
NNR	Schwartz R.H., "A cell culture model for T lymphocyte clonal anergy," Science, 1990, 248:1349-1356.
OOR	Selvakumar, A., et al., "Genomic organization and chromosomal location of the human gene encoding the B-lymphocyte activation antigen B7," Immunogenetics, 1992, 36:175-181
PPR	Tan P., et al., "Induction of Alloantigen-specific Hyporesponsiveness in Human T Lymphocytes by Blocking Interaction of CD28 with Its Natural Ligand B7/BB1," J. Exp. Med., 1993, 177:165-173.
QQR	Tivol E.A., et al., "Loss of CTLA-4 leads to massive lymphoproliferation and fatal multiorgan tissue destruction, revealing a critical negative regulatory role of CTLA-4," Immunity, 1995, 3:541-547.
RRR	Turka L.A., et al., "T-cell activation by the CD28 ligand B7 is required for cardiac allograft rejection in vivo," Proc. Natl. Acad. Sci., USA, 1992, 89:11102-11105.
SSR	Toubert A., et al., "Epitope mapping of an HLA-B27 monoclonal antibody that also reacts with a 35-kD bacterial out-membrane protein," Clin. Exp. Immunol., 1990, 82(1), 16-20.
TTR	Toubert A., et al., "Epitope mapping of HLA-B27 and HLA-B7 antigens by using intradomain recombinants," J. Immunol., 1988, 141(7), 2503-9.
UUR	Valle et al., "mAb 104, a new monoclonal antibody, recognizes the B7 antigen that is expressed on activated B cells and HTLV-1-transformed T cells," Immunol., 1990, 69(4), 531-535.
VVR	Vandenbergh P., et al., "Antibody and B7/BB1-mediated ligation of the CD28 receptor induces tyrosine phosphorylation in human T cells," J. Exp. Med., 1992, 175:951-960.
WWR	van der Merwe, et al., "CD80 (B7-1) binds both CD28 and CTLA-4 with a low affinity and very fast kinetics," J. Exp. Med., 1997, 185: 393-403.
XXR	Weyl D., et al., "Epitope mapping of human monoclonal antibodies to HLA-B27 by using natural and mutated antigenic variants," Hum. Immunol., 1991, 31(4), 271-276.
YYR	Zavazava N., et al, "Inhibition of anti-HLA-B7 alloreactive CTL by affinity-purified soluble HLA," Transplantation, 1991, 51(4), 838-42.

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.